

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMME United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria Virginia 22313-1450

Alexandria, Virginia 22313-1450 www.ospto.gov

PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,366	01/12/2001	Donald R. Boys	P665	1589
24739 75	90 11/03/2004		EXAMINER	
CENTRAL COAST PATENT AGENCY PO BOX 187			PHAM, THOMAS K	
AROMAS, CA 95004		T.	ART UNIT	PAPER NUMBER
			2121	

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<i>Y</i>						
•	Application No.	Applicant(s)				
	09/760,366	BOYS, DONALD R.				
Office Action Summary	Examiner	Art Unit				
	Thomas K Pham	2121				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep. If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tim ply within the statutory minimum of thirty (30) days d will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONED	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 28.	<u>July 2004</u> .					
2a)☐ This action is FINAL . 2b)☑ Thi	This action is FINAL . 2b)⊠ This action is non-final.					
• • • • • • • • • • • • • • • • • • • •	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)	awn from consideration.					
Application Papers						
9) The specification is objected to by the Examin 10) The drawing(s) filed on is/are: a) acceptable and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct of the oath or declaration is objected to by the Examination.	ccepted or b) objected to by the E e drawing(s) be held in abeyance. See ction is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	ate atent Application (PTO-152)				

Art Unit: 2121

Response to Amendment

1. Applicant's arguments with respect to claims 1-42 have been considered but are moot in view of the new ground(s) of rejection.

Quotations of U.S. Code Title 35

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim Rejections - 35 USC § 102

6. Claims 16-18, 21-22 and 26-29 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,738,824 ("Blair").

Regarding claims 16 and 27

Blair teaches a software-control application for enabling priority-based number switching from a lower priority access number to a higher priority access number during a data session conducted by a user connected to a data-packet-network through one of a list of available access numbers comprising:

a network-hosted part of the software application for initiating and directing the priority-based number switching based on monitored result (col. 5 lines 1-4, "GW1 determines itself to be in a state of congestion, then processing continues in step 225. In step 225, GW1 selects an alternative GW to provide dial-out service to W2, via the respective dial-out route". The gateway (GW) is switching to an another access point based on monitoring the state of congestion to find a higher priority (more accessible) GW);

a client-hosted part of the software application for configuring at least one access number list including associated priority characteristics and for communicating the listing characteristics to the network-hosted part of the software application (col. 4 lines 38-44, "The dial-out routes for which ... the Internet 142);

a network-communication path between the client-hosted part of the software application and the network-hosted part of the software application, the network-communication path enabling bi-directional communication between the parts of the software application, characterized in that the user engaged in a data session on the data-packet-network using a

lower priority access number may during the session be switched according to software instruction from the lower priority access number to an identified higher priority access number during the same session without manual intervention required of the user (col. 4 lines 16-26, "During typical GW bootup sequencing, the GWs 105 get ... in working memory of the AAA 145" and col. 6 lines 35-40, "each GW may continually check itself to determine ... service request from another node". By reading from a central static route database (list of access number), a higher priority alternate route (GW) can be selected during the continuous session.).

Regarding claims 17 and 28

Blair teaches the data-packet-network is the Internet network (col. 4 lines 10-13, "The Internet 142 has several nodes ... coupled to the Internet 142").

Regarding claim 18

Blair teaches the user utilizes a personal computer for Internet connection using dial-up modem software (col. 3 lines 49-51, "The GWs 105 provide ... different communication protocols").

Regarding claim 21

Blair teaches the network-hosted part of the software application is hosted on a network-connected server (col. 3 lines 41-64, "FIG. 1 is a block diagram ... and workstation 118").

Regarding claim 22

Blair teaches the network-hosted part of the software application includes modules for monitoring a user connection, for storing and presenting a list of ISP-access numbers, for determining higher priority from the list, for simulating an out-bound dialer, for Internet communication, for Internet navigation, for user notification, and for ringing-event detection (col. 4 lines 45-54, "FIG. 2 is a flow diagram ... from another gateway").

Art Unit: 2121

Regarding claim 26

Blair teaches the network-communication path is established through the Internet using Internet

Protocols (col. 3 lines 49-51, "The GWs 105 provide ... different communication protocols").

Regarding claim 29

Blair teaches the computerized node is a personal computer accessing through an Internet

Service Provider (ISP) and the list of access numbers comprise available alternative ISP numbers

(col. 4 lines 16-26, "During typical GW bootup sequencing, the GWs 105 get ... in working

memory of the AAA 145").

Claim Rejections - 35 USC § 103

7. Claims 1-15, 19-20, 23-25 and 30-42 are rejected under 35 U.S.C. 103(a) as being

unpatentable over U.S. Patent No. 6,738,824 ("Blair") in view of U.S. Patent No. 6,044,146

("Gisby").

Regarding claim 1

Blair teaches a network-based hardware and software system for enabling priority-based number

switching from a lower priority access number to a higher priority access number during a data

session through monitoring current connection states of a user node connected to the network

during session and comparing those states with current states of known alternate access numbers

available to the user node during the network session, comprising:

a switch for establishing call connections and performing call switching according to

instruction formulated through the monitoring (col. 1 lines 11-30).

Application/Control Number: 09/760,366

Art Unit: 2121

a network-hosted part of a software application for monitoring the current user-node connection states and the current states of the alternate access numbers and for directing the switch function based on results of the monitoring (col. 5 lines 1-4, "GW1 determines itself to be in a state of congestion, then processing continues in step 225. In step 225, GW1 selects an alternative GW to provide dial-out service to W2, via the respective dial-out route". The gateway (GW) is switching to an another access point based on monitoring the state of congestion to find a higher priority (more accessible) GW);

at least two network-access nodes connected to the network, the access nodes each accessible through dialing a network-access number from the user node (fig. 1 show at least two network-access nodes); and

a client-hosted part of the software application for listing access numbers, configuring priority states to the access numbers and for communicating the pertinent data to the network-hosted part of the software application, characterized in that a user connected to the network using a lower priority access number may continue the network session while a higher priority access number available to the user's node is identified from a list of alternate numbers through the monitoring performed by the network-hosted software application during the session, the identified number, also identified as currently accessible to the user's node, is either secured by the switch on behalf of the user, the user's node then disconnected and then re-connected to the secured number or rendered to the user in a network notification after which, the user may manually disconnect and then reconnect to the available number (col. 4 lines 16-26, "During typical GW bootup sequencing, the GWs 105 get ... in working memory of the AAA 145" and col. 6 lines 35-40, "each GW may continually check itself to determine ... service request from

another node". By reading from a central static route database (list of access number), a higher priority alternate route (GW) can be selected during the continuous session.).

Blair does not teach using the CTI-switch for establishing connection.

However, Gisby teaches a CTI telephony architecture uses for distributing phone calls based on different levels of priorities (see col. 3 line 59 to col. 5 line 10) for the purpose of allowing more ways for people to interact, other than by just telephone. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the CTI architecture of Gisby with the system of Blair because it would provide for the purpose of allowing more ways for people to interact, other than by just telephone.

Regarding claim 2

Blair teaches the network accessible through the access numbers is the Internet network (fig. 1).

Regarding claim 3

Blair teaches the Internet is access through a telephony network (fig. 1).

Regarding claim 4

Blair teaches the telephony network is the public-switched-telephony-network (PSTN) (fig. 1) network 24").

Regarding claims 5-7

Blair does not teach the priority characteristics of the access numbers include at least the access and connection costs of using the numbers. However, Blair teaches switching to an alternate access point to reduce data traffic congestion (col. 2 lines 36-48, "forwarding dial-out service provided by a gateway ... provided by the first gateway") for the purpose of minimize cost and yet reduce congestion and provide effective service to various customers.

Application/Control Number: 09/760,366

Art Unit: 2121

Regarding claim 8

Blair teaches the priority characteristic includes bandwidth characteristics of the associated

network-access nodes (col. 2 lines 36-48, "forwarding dial-out service provided by a gateway ...

Page 8

provided by the first gateway").

Regarding claims 9 and 10

Blair teaches a network-access number associated with a network-access node performing at a

higher bandwidth but does not teach making higher bandwidth a higher priority rating. It would

have been obvious to one of ordinary skill in the art to choose the higher bandwidth to be higher

priority than the low cost since the higher bandwidth would already be a more effective way of

collecting extra revenue from extracting more customers because of better service.

Regarding claim 11

Gisby teaches the network-hosted part of the software application is hosted at the CTI-switch

(col. 5 lines 1-9, "a call distribution scheme ... busy on a call and which are not").

Regarding claim 12

Gisby teaches the client-hosted part of the software application communicates to the network-

hosted part of the software application through a telephone-access number and interactive-voice-

response interaction (col. 1 lines 31-42, "Development of CTI ... satellite based, etc").

Regarding claim 13

Blair teaches the network-hosted part of the software application is hosted by network-connected

server node (col. 3 lines 41-64, "FIG. 1 is a block diagram ... and workstation 118").

Regarding claim 14

Gisby teaches the network-hosted part of the software application communicates to the CTI

switch through a network interface (col. 4 lines 14-25, "CTI processor 23 provides ... connected to LAN 57").

Regarding claim 15

Blair teaches the network-hosted part of the software application communicates with the client-hosted part of the software application through an Internet path (col. 3 lines 58-64, "The PSTN 103 is coupled ... and workstation 118").

Regarding claim 19

Blair does not teach the CTI telephony switch. However, Gisby teaches the network-hosted part of the software application is hosted on a CTI telephony switch (col. 5 lines 1-9, "a call distribution scheme ... busy on a call and which are not") for the purpose of allowing more ways for people to interact, other than by just telephone. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the CTI architecture of Gisby with the system of Blair because it would provide for the purpose of allowing more ways for people to interact, other than by just telephone.

Regarding claim 20

Blair teaches the network-hosted part of the application includes modules for monitoring a user connection, for storing and presenting a list of ISP-access numbers, for determining higher priority from the list (col. 4 lines 45-54, "FIG. 2 is a flow diagram ... from another gateway"). Gisby teaches for instructing the CTI telephone switch (col. 5 lines 1-9, "a call distribution scheme ... busy on a call and which are not").

Regarding claim 23

Gisby teaches the network-hosted part of the application controls CTI switch function through a

Art Unit: 2121

network gateway (col. 4 lines 14-25, "CTI processor 23 provides ... connected to LAN 57").

Regarding claim 24

Gisby teaches the client-hosted part of the software application communicates to the network-hosted part of the software application through a telephone-access number and interactive-voice-response interaction (col. 1 lines 31-42, "Development of CTI ... satellite based, etc").

Regarding claim 25

Gisby teaches the network-communication path is established through a telephony network using connection-oriented-switched-telephony lines (col. 4 lines 32-43, "Processor 23 is linked ... station is logged in").

Regarding claim 30

Blair does not teach the listed access numbers represent numbers generic to more than one ISP. However, having a listed access numbers represent numbers generic to more than one ISP is well known and expected in the art. U.S. Patent No. 6,351,453 by Nolting et al. teaches choosing from a list of available ISPs based on the user profile with respect to the detail record of the ISPs (col. 11 lines 16-34, "Thus, ISP Finder is an application ... high usage service"). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a list of access numbers of more than one ISP for the purpose of choosing an ISP that best match a particular user.

Regarding claim 31

Gisby teaches identification is performed in a CTI telephony switch by CTI software (col. 5 lines 1-9, "a call distribution scheme ... busy on a call and which are not").

Regarding claim 32

Art Unit: 2121

Blair teaches identification is performed in an Internet server by server software (col. 5 lines 1-8, "GW1 determines itself ... provide support as alternate GWs").

Regarding claim 33

Gisby teaches comparison is performed by CTI software associated with the CTI telephony switch (col. 5 lines 1-9, "a call distribution scheme ... busy on a call and which are not").

Regarding claim 34

Gisby teaches comparison is performed by the server software associated with the Internet server (col. 4 lines 32-39, "Processor 23 is linked ... POTS telephony communication").

Regarding claim 35

Gisby teaches identification is performed by CTI software associated with the CTI telephony switch (col. 5 lines 1-9, "a call distribution scheme ... busy on a call and which are not").

Regarding claim 36

Gisby teaches identification is performed by the server software associated with the Internet server (col. 4 lines 32-39, "Processor 23 is linked ... POTS telephony communication").

Regarding claim 37

Blair does not teach the priority states of each listed access number equate with cost of connection and operation of each number from the location of the personal computer. However, Blair teaches switching to an alternate access point to reduce data traffic congestion (col. 2 lines 36-48, "forwarding dial-out service provided by a gateway ... provided by the first gateway") for the purpose of minimize cost and yet reduce congestion and provide effective service to various customers.

Regarding claim 38

Art Unit: 2121

Gisby teaches monitoring includes calling the higher priority numbers periodically, the calls placed from the CTI telephony switch (col. 5 lines 22-39, "FIG. 3 is a block diagram ... the order of the queue").

Regarding claim 39

Gisby teaches monitoring includes calling the higher priority numbers periodically, the calls placed from a CTI telephony switch and initiated from within the Internet server, the server communicating with the switch through a network gateway (col. 5 lines 22-39, "FIG. 3 is a block diagram ... the order of the queue").

Regarding claim 40

Blair teaches monitoring includes accessing connection servers associated with the higher priority access numbers, the connection servers providing availability status of the associated number (col. 5 line 65 to col. 6 line 7, "The process 200 also provides ... select a different alternate GW").

Regarding claim 41

Blair teaches the monitoring is performed by the server software associated with the Internet server (col. 4 lines 10-13, "The Internet 142 has several nodes ... coupled to the Internet 142").

Regarding claim 42

Gisby teaches notification is sent to the personal computer upon detecting a higher priority number and switching is performed according to user response (col. 6 lines 52-56, "suitable notification is made to the agent ... audible alert").

Art Unit: 2121

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thomas Pham*; whose telephone number is (571) 272-3689, Monday - Friday from 8:00 AM - 5:00 PM EST or contact Supervisor *Mr. Anthony Knight* at (571) 272-3687.

Any response to this office action should be mailed to: Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450. Responses may also be faxed to the official fax number (703) 872- 9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas Pham

Patent Examiner

October 21, 2004

Anthony Knight
Supervisory Patent Examiner

Group 3600